



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

growing under maples and young hemlocks, yield peduncles that support one, two, three, four, five, and six spikes, all aberrant, in that each spike is lengthened into an awllike tip of leaves.

On the crest of Sunset Ridge, "Appledore," is a station where the plants show the same characteristics in fruiting, in addition to having the trailing stems form a distinct ring. In the latter place, there are hummocks lying open to the sun, over which some of the *Lycopodium* runs.

Fern students in Hartland invite special observation of these forms on the part of any and all interested in plant morphology and ecology. Specimens of the different lycopodiums mentioned in this article have been placed in the herbarium of the Hartland Nature Club, and photographs of them have been taken by Mrs. Evaline Darling Morgan.

WOODSTOCK, VT.

Carl Frederik Albert Christensen: some biographical notes

R. C. BENEDICT

(WITH PORTRAIT)

Some years ago, in the winter of 1894-1895, a young Danish student who was preparing to take his master's degree in botany at the University of Copenhagen, had occasion, in order to complete his course requirements, to select and develop a topic relating to some special group of plants. The student, Mr. Christensen, chose to study ferns. From that beginning he has continued his work with these plants until, at the present time, he may well be considered the leading active student of ferns.

His Index Filicum is undoubtedly the most useful



Yours sincerely
Carl Christensen.
Febr. 1911.

fern book ever issued. With its 744 pages, including 23,499 specific names, it bears about the same relation to fern study that a dictionary bears to the study of a foreign language. Since this much needed task was completed, Mr. Christensen has published a number of important monographic papers dealing especially with the genus *Dryopteris*. Three of his shorter papers have appeared in the AMERICAN FERN JOURNAL, and it is with a view of making readers of the JOURNAL better acquainted with Mr. Christensen that the present article is written.

Carl Frederik Albert Christensen was born in a village on the island of Lolland in South Denmark on the 16th of January 1872. His early education was obtained in the elementary and higher schools of the island of Falster. In 1888 he went to a secondary school in Copenhagen to prepare for the entrance "examen" of the University of Copenhagen, which he entered in 1891. Here, for the first year he studied with the intention of following medicine as a profession, but after this he decided to specialize in natural science, particularly botany, which had long been a favorite pursuit of his. His teacher in this subject was Prof. Eugenius Warming. Beside botany, he studied also physics, chemistry, zoology, mineralogy, and geology. In 1900 he received the degree of Master of Science from the university. Since then he has worked in the library and museum of the university, and has taught in the secondary schools. The botanical library there is particularly rich in old literature, which was especially necessary during his preparation of the Index.

In October 1900 he was married to Miss Aff Derschen. Since then three daughters have been born.

The selection of ferns for his special study was in Mr. Christensen's case entirely accidental, and yet his choice had in it the same elements that have led most members of the American Fern Society to be interested in these

plants. As already noted, he had occasion in the winter of 1894-1895, to choose some group of plants as a "speciale," i. e., one which he had to study so thoroughly that he could be said to know it perfectly. At that time he was engaged in collecting in the field, winter stages of the wild plants of his country. On one excursion, on a cold winter day when the ground was white with snow, he came into a beech forest where he found in the snow some fern leaves which were still quite fresh and green, offering a beautiful contrast to the white snow. He knew at that time scarcely more than a dozen fern species, and the beautiful leaves which he had found seemed entirely unknown to him. He preserved some of the leaves and as he later tried to identify them, he was struck with their beauty: in their beautiful outline and delicate structure, they seemed to him esthetically far to surpass all other plants. He was seized by a veritable *amor sancta* for them, and from that moment his "speciale" was chosen. The particular fern found that day was believed then to be the reputed hybrid *Dryopteris cristata* \times *spinulosa*, sometimes identified with the American *D. Boottii* (Tuck.) Underw., but it was probably a form of the true *spinulosa*. It may be noted that here in America reputed crosses between the more evergreen species and those that are less so are usually intermediate in this respect as well as in the other characters of difference between the species.

In preparing these notes, I was interested to learn how Mr. Christensen came to publish his scientific contributions in English. The text of the recent articles in the JOURNAL appeared almost exactly as written, only a few minor changes having been made in the phraseology. Below I quote in very slightly modified form his reply to my request for information.

"We small nations are of course compelled to communicate in a foreign language, as very few foreigners under-

stand Danish. In the higher schools, English together with German, French, and Latin are taught, but at my time English was read only, not written or spoken as in the present secondary schools. As a young student I could read English but scarcely write anything correctly. During my botanical studies, I was compelled almost daily to read English scientific literature, and *peu à peu* I learned the usual combinations, scientific words, etc. I have thus taught myself to write English. . . . Beginning a correspondence with foreign botanists, I tried to write partly in German and partly in English. German is easy for us Danes to speak but very difficult to write correctly because of its difficult grammar. English, on the other hand, difficult for us to speak because of its pronunciation, is far the easiest language for us to write, because its grammar is like our own, very simple, and the position of the words is very like that of Danish. I have therefore chosen English as my language of correspondence, and I now write all my letters, even to Germans, in English. I know very well that my English is bad, but I know also that I can express my thoughts in that language so concisely that I rarely fear to be misunderstood."

Certainly readers of Mr. Christensen's recent papers in the JOURNAL will be ready to affirm the truth of the last statement in the preceding sentence, and we shall all hope to read more of his articles in future numbers of the JOURNAL.

I include below a list of his contributions to fern literature. I am not sure that it is complete, but I believe it is practically so. It is interesting to note that all of the papers deal at least in part with American ferns. The papers are listed in chronological order.

1. New ferns from Brazil. Bot. Tidsskr. **25**: 77-81. 27 D 1902.

2. On the American species of *Leptochilus*, sect. *Bolbitis*. Bot. Tidsskr. **26**: 283-297. f. 1-8. 30 N 1904.
3. A new *Elaphoglossum* from Brazil. Bot. Tidsskr. **26**: 299, 300. 30 N 1904.
4. Index Filicum i-lx+1-744. 1905.
5. Revision of the American species of *Dryopteris* of the group of *D. opposita*. 1-90. 1907. (Kgl. Danske Vidensk. Selsk. Skrifter VII. **4**: 247-336.)
6. *Dryopteris* nova brasiliensis. Repert. Sp. Nov. **6**: 380, 381. 1 Mr 1909.
7. On *Stigmatopteris* a new genus of ferns with a review of its species. Bot. Tidsskr. **29**: 291-304. f. 1-15. 25 My 1909.
8. The American ferns of the group *Dryopteris opposita* contained in the U. S. National Museum. Smithsonian. Misc. Coll. **32**: 365-396. 12 Jl 1909.
9. Ueber einige Farne in O. Swartz' Herbarium. Arkiv Bot. **9**^u: 1-46. pl. 1-5. f. 1-13. 22 F 1910.
10. On some species of ferns collected by Dr. Carl Skottsberg in temperate South America. Arkiv Bot. **10**²: 1-32. pl. 1. f. 1-4. 9 S 1910.
11. On the genus *Dryopteris*. Am. Fern Jour. **1**: 33-37. 13 F 1911.
12. The *Pteridophyta* of the arctic regions. Am. Fern Jour. **1**: 65-70. 3 My 1911.
13. Four new ferns. Repert. Sp. Nov. **9**: 370-372. 10 Je 1911.
14. The tropical American species of *Dryopteris* subgenus *Eudryopteris*. Am. Fern Jour. **1**: 93-97. 7 Au 1911.
15. On a natural classification of the species of *Dryopteris*. Biol. Arbejder Tilegnede E. Warming 73-85. 3 N 1911.

NEW YORK CITY.